microprocessor to switch the ballast to the emergency lighting mode of operation. The DC bus voltage on line 93 is divided by resistors 112 and 113 to a voltage range acceptable to the microprocessor so that is may monitor this bus voltage and shut the ballast off if the DC voltage drops to a point where a battery supplying it could be damaged.

Although the present invention has been described in connection with preferred embodiments thereof, many variations and modifications will now become apparent to those skilled in the art. It is preferred, therefore, that the present invention be limited, not by the specific disclosure herein, but only by the appended claims.

What is claimed is:

1. A gas discharge lighting system for regular and emergency lighting comprising:

a gas discharge lighting device;

a source of alternating current input power;

a electronic ballasting circuit having a direct current requirement and coupled between said gas discharge lighting device and said source of input power comprising;

an alternating current-to-direct current conversion means;

a power regulator connected to said conversion means for converting the output of said alternating current to direct current conversion means to said regulated direct current required to operate said ballasting circuit;

a controllable output direct current to alternating current inverter that operates with a nearly square wave output at a frequency above that of audible sound;

an impedance network interposed between said inverter and said gas discharge lighting device to modify said square wave output of said inverter to provide proper operation of said gas discharge lighting device;

a controlling device that controls the operation of said inverter and thus, via said impedance network, the amount of power delivered to said gas discharge lighting device;

a connection between said source of alternating current input power and said controlling device to allow said controlling device to monitor the presence or absence of said alternating current input power; and

an external source of direct current input power coupled by an unidirectional current flow device to the input of said power regulator.

2. The gas discharge lighting system for regular and emergency lighting as set forth in claim 1 wherein said controlling device is a microprocessor coupled to said gas discharge device to monitor is operation and interconnected with said controllable output direct current to alternating current inverter.

3. The gas discharge lighting system for regular and emergency lighting as set forth in claim 2 wherein said controlling device is programmed to reduce the power drawn from said source of direct current power by lowering the power delivered to said gas discharge lighting device upon the detection of the absence of power from said source of alternating current power.

4. The gas discharge lighting system for regular and emergency lighting as set forth in claim 1 wherein said source of direct current power is or includes a battery.

5. The gas discharge lighting system for regular and emergency lighting as set forth in claim 4 further comprising a charging circuit to output direct current power to said source of direct current power to effect charging of batteries connected to said source of direct current power when said source of alternating power is operational.

6. The gas discharge lighting system for regular and emergency lighting as set forth in claim 5 wherein the voltage level of said source of direct current power is connected to said controlling device with a program included in said controlling device the shuts down the ballast upon detecting a voltage indication that said battery has reached a level the further discharge may cause damage.